UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/18/2004

Heidi S. Nebel, Zarley, McKee, Thomte, Voorhees & Sease Suite 3200 801 Grand Avenue Des Moines, IA 50309-2721 EXAMINER

PAPER NUMBER

MEHTA, ASHWIN D

ART UNIT

DATE MAILED: 02/18/2004

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ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
٠	09/759,791	01/12/2001	Gerhard P. Weber	P04842US0 PHI 1374	2854

TITLE OF INVENTION: HYBRID MAIZE PLANT & SEED 39R62

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	05/18/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000 INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 7590 02/18/2004 Heidi S. Nebel, Certificate of Malling or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO. on the date indicated below. Zarley, McKee, Thomte, Voorhees & Sease **Suite 3200** 801 Grand Avenue (Depositor's name) Des Moines, IA 50309-2721 (Signature) (Date FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. 09/759.791 01/12/2001 Gerhard P. Weber P04842US0 PHT 1374 2854 TITLE OF INVENTION: HYBRID MAIZE PLANT & SEED 39R62 APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE \$1330 05/18/2004 \$1330 nonprovisional **EXAMINER** ART UNIT CLASS-SUBCLASS 1638 800-320100 MEHTA, ASHWIN D 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent [1] "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear on the patent. Inclusion of assignce data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual a corporation or other private group entity government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. ☐ Issue Fee Dublication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _______ (enclose an extra copy of this form). ☐ Advance Order - # of Copies _ Deposit Account Number Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/759,791	01/12/2001	Gerhard P. Weber	P04842US0 PHI 1374	2854	
7590 02/18/2004			EXAMINER MEHTA, ASHWIN D		
Heidi S. Nebel,					
Zarley, McKee, Thomte, Voorhees & Sease Suite 3200			ART UNIT	PAPER NUMBER	
801 Grand Avenue Des Moines, IA 50309-2721			1638 DATE MAILED: 02/18/2004		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 113 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 113 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)			
	09/759,791	WEBER, GERHARD P.			
Notice of Allowability	Examiner	Art Unit			
	Ashwin Mehta	1638			
The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.					
1. 🖾 This communication is responsive to papers received 10 D	<u>ecember 2003</u> .				
2. The allowed claim(s) is/are <u>1-4 and 67-95</u> .					
3. The drawings filed on are accepted by the Examiner.					
 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL. 7. DEPOSIT OF amid/or INFORMATION about the deposit of BIOLOGICAL MATERIAL. 					
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☑ Interview Summary Paper No./Mail Dat 98), 7. ☑ Examiner's Amendr	te <u>2112004</u> .			

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 21, 2003 has been entered.

Specification

2. The objection to the specification is withdrawn in light of the insertion of ATCC deposit numbers in pages 7 and 42.

Claim Rejections

3. The rejections of claims 8, 44-51, and 55-65 under 35 U.S.C. 112, 1st and/or 2nd paragraphs are withdrawn, in light of the claim amendments or cancellations.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lila Akrad on February 11, 2004.

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The application has been amended as follows:

The following new claims have been added:

81. (New) A method of producing a male sterile hybrid maize plant comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a nucleic acid molecule that confers male sterility and crossing said inbred maize parent plants to produce said male sterile hybrid maize plant.

- 82. (New) A male sterile maize hybrid plant produced by the method of claim 81.
- 83. (New) A method of producing an herbicide resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a transgene that confers herbicide resistance to generate an herbicide resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said herbicide resistant hybrid maize plant.
- 84. (New) An herbicide resistant hybrid maize plant produced by the method of claim 83.

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85. (New) The herbicide resistant hybrid maize plant of claim 84, wherein the transgene confers resistance to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

86. (New) A method of producing an insect resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a transgene that confers insect resistance to generate an insect resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said insect resistant hybrid maize plant.

87. (New) An insect resistant hybrid maize plant produced by the method of claim 86.

88. (New) The insect resistant hybrid maize plant of claim 87, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.

89. (New) A method of producing a disease resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a transgene that confers disease resistance to generate a disease resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said disease resistant hybrid maize plant.

90. (New) A disease resistant hybrid maize plant produced by the method of claim 89.

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91. (New) A method of producing a hybrid maize plant with decreased phytate content comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a transgene encoding phytase to generate an inbred maize parent plant with decreased phytate content and crossing said inbred maize parent plants to produce said hybrid maize plant that confers decreased phytate content.

- 92. (New) A hybrid maize plant with decreased phytate content produced by the method of claim 91.
- 93. (New) A method of producing a hybrid maize plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming at least one of inbred maize parent plants GE570800 and GE533276, representative samples of which have been deposited as PTA-5510 and PTA-5518 respectively, with a transgene encoding a protein selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme to generate an inbred maize parent plant with modified fatty acid metabolism or modified carbohydrate metabolism and crossing said inbred maize parent plants to produce said hybrid maize plant that confers modified fatty acid metabolism or modified carbohydrate metabolism.
- 94. (New) A hybrid maize plant produced by the method of claim 93.

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95. (New) The hybrid maize plant of claim 94 wherein the transgene confers a trait selected from

the group consisting of waxy starch and increased amylose starch.

5. Claims 1-4 and 67-95 are allowed.

Contact Information

Any inquiry concerning this or earlier communications from the examiner should be

directed to Ashwin Mehta, whose telephone number is 571-272-0803. The examiner can

normally be reached on Mondays-Thursdays and alternate Fridays from 8:00 A.M to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy

Nelson, can be reached at 571-272-0804. The fax phone numbers for the organization where this

application or proceeding is assigned are 703-305-3014 and 703-872-9306 for regular

communications and 703-872-9307 for After Final communications. Any inquiry of a general

nature or relating to the status of this application or proceeding should be directed to the

receptionist whose telephone number is 571-272-1600.

February 12, 2004

Ashwin D. Mehta, Ph.D.

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Primary Examiner

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